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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,605	02/14/2006	Ulrich Rohs	ROHS ET AL - 20 PCT	1728
25889	7590	02/06/2009		
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			EXAMINER PANG, ROGER L	
			ART UNIT 3655	PAPER NUMBER
			MAIL DATE 02/06/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/529,605	Applicant(s) ROHS ET AL.	
	Examiner Roger L. Pang	Art Unit 3655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 69-81, 83-94, 99-109, 124-127, 129-178 and 180-204 is/are pending in the application.
- 4a) Of the above claim(s) 99-109, 134, 147-160, 166-178 and 180-204 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 69-81, 90-94, 164 and 165 is/are allowed.
- 6) ☒ Claim(s) 83-89, 124-127 and 129-133, 135-146, 161-163 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1-2-09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following action is in response to the amendment filed for application 10/529,605 on January 2, 2009

Election/Restrictions

This application contains claims 99-109,134,147-160,166-178 and 180-204 drawn to an invention nonelected with traverse in the reply filed on May 2, 2008. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Objections

Claim 81 is objected to because of the following informalities: on line 3, it is suggested that “which” be removed. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 142-146 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 142, any limitations following the word “particularly” are indefinite as it is not a positive recitation of the limitations.

With regard to claim 144, any limitations following the word “preferably” are indefinite as it is not a positive recitation of the limitations.

Art Unit: 3655

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Please Note: With regard to the rejections, for the sake of brevity, only the main limitations will be listed, as their respective functions and relationships to each other are the same as claimed.

Claims 83-89 are rejected under 35 U.S.C. 102(b) as being anticipated by Rohs '048.

- cones 2, 3
- revolving ring 4
- ring surrounding one cone and passing through a constant gap (Fig. 3)
- pressure device and spring element (Fig. 9; Col. 8)
- radial projections 35
- bracing bearing 33, pressure elements (Fig. 9; Col. 8)
- torque "sensor" (Col. 8)
- torque measurement (Fig. 9; Col. 8)
- connecting gap (Fig. 9)

Art Unit: 3655

Claims 125, 127, 129-130, and 132 are rejected under 35 U.S.C. 102(b) as being anticipated by Nobumoto '011.

- Transmission elements 33/34
- first stage 8 (CVT)
- second stage 6 (differential element)
- switching gear 43
- second switching gear part or freewheel 29
- pump wheel 12
- turbine wheel 13
- coaxial drive and output (Fig .1)

Claims 135-144 are rejected under 35 U.S.C. 102(b) as being anticipated by Holliday '465.

- Transmission Elements 3 (cones)
- Coupling Element 1 (ring)
- Running Paths (col. 6)
- Grooves (Col. 6; Fig. 5)
- Textured Surfaces (Col. 6; Fig. 5)

Art Unit: 3655

Claims 161 and 163 are rejected under 35 U.S.C. 102(b) as being anticipated by Rohs '131.

- Transmission Elements 3, 4
- Coupling Element 5
- Holding Device (Fig. 1)
- Stationary Holding Device (wall)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 124 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nobumoto '011 in view of Miyata '777. With regard to claim 124, Nobumoto teaches a revolving transmission comprising at least two revolving transmission elements 33/34, which may transmit a torque frictionally, wherein at least one forward gear and at least one reverse gear are implemented by a differential gear part 6 being positioned in series with said at least two transmission elements, at least on assembly of the differential gear part being able to be fixed alternately with the housing and/or with another assembly of the differential gear part, and further comprising at least first 8 and second 8 parallel which may be switched alternately into a transmission path, wherein said first partial transmission comprises a continuously variable transmission with said at least two revolving transmission elements. Nobumoto lacks the specific teaching of a third partial

Art Unit: 3655

transmission. Miyata teaches a similar transmission comprising a first 220 and second 221 partial transmissions, and wherein said transmission path further comprises a third partial 231 transmission in series with and following after said first and second partial transmissions in a direction from engine 215 to wheels. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nobumoto to employ a third partial transmission in view of Miyata in order to better distribute the output torque to said wheels.

Claims 126 and 133 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nobumoto as applied to claims 125 and 132 above, respectively, and further in view of Miyata '777. With regard to claim 126, Nobumoto teaches the transmission wherein said transmission path comprises first and second parallel partial transmission paths (fig. 1). Nobumoto lacks the specific teaching of a third partial transmission path. Miyata teaches a similar transmission comprising a first 220 and second 221 partial transmissions, and wherein said transmission path further comprises a third partial 231 transmission in series with and following after said first and second transmission paths in a direction from engine 215 to wheels. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nobumoto to employ a third partial transmission in view of Miyata in order to better distribute the output torque to said wheels. With regard to claim 133, Nobumoto teaches the transmission but lacks the teaching of a differential gear part provided in the coaxial output. Miyata teaches a similar transmission wherein a differential gear part 241 is provided in an output. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nobumoto to employ a differential in the coaxial output in view of Miyata in order to better distribute the output torque to said wheels.

Art Unit: 3655

Claim 131 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nobumoto as applied to claim 125 above, and further in view of Stoeckicht '676. Nobumoto teaches the transmission, but lacks the teaching of said CVT comprising of cones. Stoeckicht teaches a CVT comprising of cones ab and a coupling member (Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nobumoto to employ a cone CVT in view of Stoeckicht in order to provide a less complex transmission.

Claims 145-146 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holliday as applied to claim 144 above, and further in view of Rohs '131. Holliday teaches the transmission, but lacks the teaching of a liquid that wets the running surface of the transmission and coupling elements. Rohs teaches of using a liquid to wet the transmission and coupling elements (Col.2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Holliday to employ a liquid in view of Rohs in order to increase the durability and service life of the transmission (Col. 2).

Claim 162 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rohs '131 in view of Herscovici '157. Rohs teaches a transmission having two cones 3/4 as revolving transmission elements, each of which has at least one running surface for a revolving ring 5 as a revolving coupling element, said at least one running surface having at least two running paths for the coupling element having different running radii (Fig. 3), said ring surrounding one of said cones and passing through a constant gap between said transmission elements (Fig. 1), comprising a holding device for positioning said coupling element at said running radii (Fig 2). Rohs lacks the teaching wherein the end positions are detected via a sensor. Herscovici teaches a similar transmission wherein a ring and CVT are actuated to various positions, and wherein

Art Unit: 3655

detection of the end positions of the coupling element through a position sensor 206. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rohs employ an end position sensor in view of Herscovici in order to stop the ring actuator and save on energy and prevent unnecessary damage.

Allowable Subject Matter

Claims 69-81,

90-94 and 164-165 are allowed.

Response to Arguments

Although several of the amended claims have required a new rejection (thereby rendering some of the arguments moot), the applied art will still be explained with regard to the relevant arguments.

With regard to the Holliday reference, Holliday teaches an opposing cone drive (Fig. 1). Applicant argues that the surfaces are identical, are not textured, and do not provide a frictional fit. A positive-locking fit can also be considered a frictional fit, as friction is present between the interlocking elements. Also, in Col. 6, it is explained that either/both the cones and the belt could have frictional surfaces. Also, a toothed surface is considered to be different than a flat rigid/frictional surface.

With regard to Rohs '131, applicant argues that the wall does not constitute a stationary holding device. Applicant is directed to Fig. 33 of the present invention which appears to be a projection from a wall that holds the device. Applicant is now directed to Fig. 2 of Rohs, which shows respective ends for the belt actuator. Since the ends are stationary and prevent the belt from moving any further, they do read upon "stationary holding devices."

Art Unit: 3655

With regard to Nobumoto, The configuration of a parallel differential device (FWD/REV) and CVT are exactly the same as the present invention. The switching gear 43 and it's location within the transmission is also identical.

Applicant's arguments have been considered, but are not persuasive.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

DeVincent, Sagata and Chambers have been cited to show similar pressure mechanisms.

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. The central facsimile number is (571) 273-8300. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

Art Unit: 3655

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

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Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L. Pang whose telephone number is 571-272-7096. The examiner can normally be reached on 5:30am to 4:00pm.

Art Unit: 3655

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roger L Pang/
Primary Examiner, Art Unit 3655

Roger L Pang
Primary Examiner
Art Unit 3655

January 31, 2009